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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
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4138

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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/506,434

Applicant(s)

NAGATA ET AL.

Examiner

Jonathan B. Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,8-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,7,13 and 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-12,14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/9/2007, 7/6/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION***Election/Restrictions***

Applicant's election of invention 1 in the reply filed on 9/25/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Applicant's arguments that invention 1 also encompasses claim 8 is persuasive.

Claims 3,4,7,13 and 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/25/2007.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is unclear whether the applicant intends to claim an apparatus, a manufacture or a method. As written, as an apparatus claim, it does not contain any structural limitations. For the purposes of this action this claim has been interpreted as reciting an ECG measuring and recording device that comprises a CPU.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5,9,11, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5,9,11 and 12 contain intended use recitations, which carry little patentable weight. As such these claims do not further limit the claims that they depend upon. For the purposes of this action these claims have been rejected as if they contained the limitations that their language suggests. The claims might be amended to include the limitations that they do not include. For example claim 5 might be amended to replace the words "is to be used to display" with "is displayed on".

With regard to claim 5, it is unclear as to what the metes and bounds of this claim are. The indefiniteness of claim 5 precludes examination of it with regard to the prior art.

The applicant makes many more intended use recitations, which also carry little patentable weight.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated as claimed by Case 3,983,867.

Regarding claim 1, Case teaches an electrocardiogram chart data-generating device for generating chart data to be used to display charts based on measured ECG data comprising: means for generating feature value indicating an ECG feature value Figs 4-13; and means for generating chart data based on the feature value data 32, wherein the chart data is to be used to display a chart that relates the feature value to each portion of the heart.

Regarding claim 5, Case teaches the chart data is to be used to display a chart that arranges each feature value at the corresponding portion of the heart (Fig 17).

Regarding claim 9, Case teaches the chart data is to be used to display a chart that relates the feature value to each portion of the heart including at least left portion of the heart, right portion of the heart, bottom portion of the heart, front portion of the heart, or inner portion of the heart Fig 18.

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Regarding claim 10, Case teaches the feature value data is based on the constituent elements of an ECG including at least p wave, q wave, r wave, s wave, st segment, or t wave Fig 17.

Claim 14 as best understood is rejected under 35 U.S.C. 102(b) as being anticipated as claimed by Matsumura 6,856,832.

Regarding claim 14, Matsumura teaches an ECG chart data-generating device (Col. 5 ll. 43-58) for generating chart data based on measured ECG data, a central processing unit (Fig 11) of the ECG chart data-gathering device is to execute the procedures of: generating feature value data indicating an ECG feature value; and generating chart data based on the feature value data, wherein the chart data is to be used to display a chart that relates the feature value to each portion of the heart.

See the rejection under 35 USC 101 above for the interpretation of this claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Case 3,983,967 in view of Hamilton 2003/0208128.

Regarding claim 2, Case teaches an electrocardiogram chart data-generating device for generating chart data to be used to display charts based on measured ECG data comprising: means for generating feature value indicating an ECG feature value Figs 4-13; and means for generating chart data based on the feature value data 32, wherein the chart data is to be used to display a chart that relates the feature value to each portion of the heart.

Case does not teach the following claimed limitations: a computer readable medium having stored thereon the computer program for an ECG chart data-gathering device that generates chart data to be used to display charts based on measured ECG data, wherein the program is implemented in a computer and capable of causing the computer to perform: means for generating feature value data indicating an ECG feature value; and means for generating chart data based on the feature value data, wherein the chart data is to be used to display a chart that relates the feature value to each portion of the heart.

Hamilton teaches, in the same field of endeavor, a computer readable medium having stored thereon the computer program for heart rate data-gathering device that generates chart data to be used to display charts based on measured heart rate data, wherein the program is implemented in a computer (Para. 16).

It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the invention of Case in view of Hamilton in order

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to make the invention usable in a computer, outside the clinical setting (Para. 16).

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Case 3,983,967 in view of Patnoi 4,214,590.

Regarding claim 6, Case teaches the invention as discussed above.

Case does not teach the following claimed limitations: means for display control for varying the display style of the feature value when the feature value is in an abnormal range.

Patnoi teaches means for display control for varying the display style of the feature value when the feature value is in an abnormal range (Patnoi Col 9 ll. 63 – Col 10 ll. 52).

It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the invention of Case in view of Patnoi in order to ensure that the data is readily discernible (Patnoi Col 9 ll. 63 – Col 10 ll. 52).

Regarding claim 8, Case teaches the invention as discussed above.

Case does not teach the following claimed limitations: the display controlling means or means for displaying the abnormal value is to hold display of the feature value constant even when the feature value varies within a normal range.

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Patnoi teaches the display controlling means or means for displaying the abnormal value is to hold display of the feature value constant even when the feature value varies within a normal range (Patnoi Col 9 ll. 63 – Col 10 ll. 52).

It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the invention of Case in view of Patnoi in order to ensure that the data is readily discernible (Patnoi Col 9 ll. 63 – Col 10 ll. 52).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Case 3,983,967 in view of Baba 6,725,088.

Regarding claim 11, Case teaches the invention as discussed above.

Case does not teach the following claimed limitations: the chart data is to be used to display the feature value in a radar chart form.

Baba teaches, in the same field of endeavor, displaying data in a radar chart form (Col. 9 ll. 38 – Col. 10 ll. 27).

It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the invention of Case in view of Baba in order to display the data in alternative format.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Case 3,983,967 in view of Dubin.

Regarding claim 12, Case teaches the invention as discusses above.

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Case does not teach the following claimed limitations: the chart data is to be used to display the feature value on a heart image.

Dubin teaches the chart data is to be used to display the feature value on a heart image (figure on page 209).

It would have been obvious to a person having ordinary skill in the art at the time of invention to modify the invention of Case in view of Dubin in order to create an instructional tool for demonstrating the principles of cardiac vector analysis. (Dubin page 209)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan B. Thomas whose telephone number is (571)270-3082. The examiner can normally be reached on Mon-Fri 7:30-5 EST. Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 5712724868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/15/2007



EHUD GARTENBERG
SUPERVISORY PATENT EXAMINER

10/15/07